ATTACHMENT B

REMARKS

By the present amendment, Applicants have made minor changes to the claims in an effort to overcome some of the objections of the Examiner and to eliminate claims deemed duplicative by the Examiner. Accordingly, Claims 2, 3, 5, 12, 14, 21, and 23-25 have been amended, and Claims 26-29 are added which relate to other specific sequences disclosed in the application, as described in more detail below, which are not found in the prior art. Claims 1, 4, 6-11, 13, and 15-20 have been canceled without prejudice. Applicants submit that in light of the Examiner's finding that Claims relating to the sequences were free of the prior art, the present application overcomes all prior objection and has been placed in condition for allowance, as explained in more detail below.

In the Official Action, the Examiner made a general objection to Claims 2, 3, 5, 8, 9, 11, 17, 18, 24 and 25 that these claims contained duplicative subject matter. At the same time, the Examiner considered these claims to be free of the prior art searched, and this finding is acknowledged with appreciation. Without addressing the merits of the Examiner's prior objection, Applicants have amended the claims in such a manner that each individual sequence now forms the basis for one independent claim only, and thus the claims as amended are not duplicative in any manner, and the Examiner's objection is traversed.

In the Official Action, the Examiner rejected Claims 6 and 19 under 35 U.S.C. §112, second paragraph, on the basis that the language "ligand binding region A" would not apprise one skilled in the art as to the metes and bounds of the invention. Applicants

contest this characterization since the term "ligand binding region A" or "A domain" with regard to staphylococcal surface binding proteins is well established in the field and would be immediately recognizable to one skilled in the art. However, in an effort to expedite prosecution of this matter, Applicants have amended the claims to eliminate reference to the specific term "ligand binding region A." Instead, Applicants have provided new claims which more specifically provide the sequences involved in such regions, as set forth in more detail below.

In particular, new claims 26-29 relate to the ligand binding region A of the SdrG protein as disclosed in the present application, along with the specific nucleic acids that encode this region. As background, in the present application, Figure 3 discloses the nucleic acid encoding the SdrG protein as well as the amino acid sequence of the SdrG protein (in bold) along with their flanking sequences. Accordingly, these figures show the full nucleic acid sequences as well as to the specific nucleic acid sequences coding the actual SdrG protein (as shown in bold in Fig. 3). As is shown in Figure 3, the actual coding for SdrG is shown with flanking sequences beyond the actual protein, and thus the nucleic acid sequence for SdrG, the full nucleic acid sequence (SEQ ID NO: 7) also includes coding for the flanking sequences, with the coding for the actual SdrG protein starting at nucleic acid number 102 of SEQ ID NO: 7 and going to nucleic acid 2894 of SEQ ID NO: 7. With regard to the SdrG protein, this protein is shown in full as SEQ ID NO: 10, and these sequences are reflected in the prior claims which have been amended so that there is at most one independent claim for each sequence as recommended by the Examiner.

However, with regard to the ligand binding region A of the SdrG protein as reflected in the claims, Applicants have now added new claims 26-29 which more precisely refer to

the actual sequences involved. The ligand binding regions, or "A domains", of the Sdr proteins of the invention, including SdrG, are shown in the specific schematic drawings included in Figure 5. In particular, Figure 5B, shows that the proteins SdrF, SdrG and SdrH all have signal sequences denoted as "S" (combined with the number of amino acids in the particular region), and an A domain (or ligand binding region) designated starting with "A" which follow the "S" region. See also the text of the application at Page 10, lines 20-28.

In this regard, in the SdrG protein, the signal region S is shown to be 50 amino acids long, and the region A (the ligand binding region A) is 548 amino acids long. This means that ligand binding region A goes from amino acid 51 to amino acid 598 of the full protein SdrG (SEQ ID NO: 10). This also means that the nucleic acid region coding for the SdrG protein will be found at nucleotides 252 to 1895 of SEQ ID NO:7. Accordingly, Applicants have added the specific sequence information regarding the SdrG ligand binding region into new claims 26-29, and as with the other claims found to be free of the prior art by the Examiner, these claims are also free of the cited prior art and are thus allowable at this time.

Finally, the Examiner rejected Claims 1, 4, 6, 7, 10, 12-16 and 19 under 35 U.S.C. § 102(b) as being anticipated by Guss et al. WO 97/48727. Without addressing the merits of the Examiner's arguments, this rejection has been made moot by the present amendments which now direct the claims to the subject matter that the Examiner has deemed free of the prior art, and thus this rejection, insofar as applied to the claims as amended, is respectfully traversed and should be withdrawn.

In light of the amendments and arguments as set forth above, Applicants submit that the application is now in condition for immediate allowance, and such action is respectfully requested.

END OF REMARKS